

1/5/1

013259764 **Image available**

WPI Acc No: 2000-431647/200037

XRPX Acc No: N00-322081

Arrangement for transferring piezoelectric actuator's deflection to control element of diesel injection valve - has piston and holder elements which are axially displaced with respect to each other by actuator deflection from rest position.

Patent Assignee: SIEMENS AG (SIEI)

Inventor: KLUEGL W

Number of Countries: 021 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200036293	A1	20000622	WO 99DE3847	A	19991201	200037 B
DE 19858476	A1	20000629	DE 1058476	A	19981217	200038
EP 1144845	A1	20011017	EP 99962111	A	19991201	200169
			WO 99DE3847	A	19991201	

Priority Applications (No Type Date): DE 1058476 A 19981217

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200036293 A1 G 20 F02M-047/02

Designated States (National): JP US

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE

DE 19858476 A1 H02N-002/04

EP 1144845 A1 G F02M-047/02 Based on patent WO 200036293

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI

LU MC NL PT SE

Abstract (Basic): WO 200036293 A

The arrangement has a transfer module (5) which forms an interaction between the (2) actuator and the control element (3), defining a pressure chamber (91) and balance chamber (92) at least partially filled with hydraulic medium and in mutual contact. The transfer module contains a piston element (51) and a holder element (52) which engage each other telescopically.

A pressure chamber is formed between the piston and holder elements, which are axially displaced with respect to each other by the actuator deflection from a rest position, in which the chamber connection is fully open, into a second position, in which the connection is essentially closed.

USE - For transferring actuator deflection to control element for diesel injection valve, especially common-rail system.

ADVANTAGE - High reliability and long operating life are achieved with damped transfer of actuator deflection.

Dwg.1/2

Title Terms: ARRANGE; TRANSFER; PIEZOELECTRIC; ACTUATE; DEFLECT; CONTROL; ELEMENT; DIESEL; INJECTION; VALVE; PISTON; HOLD; ELEMENT; AXIS; DISPLACE; RESPECT; ACTUATE; DEFLECT; REST; POSITION

Derwent Class: Q51; Q53; X22

International Patent Class (Main): F02M-047/02; H02N-002/04

International Patent Class (Additional): F01L-001/24; F02M-051/06;

F02M-059/46

File Segment: EPI; EngPI